

## **ACHIEVING AUTONOMIC BEHAVIOR IN OPERATING SYSTEM VIA A HOT-SWAPPING MECHANISM**

### **ABSTRACT OF THE DISCLOSURE**

Systems, especially operating systems, are becoming more complex to the point where maintaining them by humans is becoming nearly impossible. Many corporations have recognized this trend and have begun investing in autonomic technology. Autonomic technology allows a piece of software to monitor, diagnose, and repair itself. This can be used for improved performance, reliability, maintainability, security, etc. Disclosed herein is a mechanism to allow operating systems to hot swap a piece of operating system code, while continuing to offer to the user the service which that code is providing. This can be used, for examples, to increase the performance of an application or to fix a detected security hole live without bringing the machine down. Some autonomic ability will be mandatory in next generation operating system for without it they will collapse under their own complexity. The invention offers a key component of being able to achieve autonomic computing.